



UNITED STATES DEPARTMENT OF COMMERCE
Pat nt and Trad mark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/437,276	11/10/99	PAULS	M 3548.04-1

IM62/0515
PHILLIPS MOORE LEMPION AND FINLEY
SUITE 6
385 SHERMAN AVENUE
PALO ALTO CA 94306-1840

EXAMINER

SERGEANT, R

ART UNIT

PAPER NUMBER

1711

DATE MAILED:

05/15/00

Please find below and/or attached an Office communication concerning this application r
proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/437,276

Applicant(s)

Pauls et al.

Examiner

Rabon Sergeant

Group Art Unit

1711



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-28 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-28 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1711

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 16, 25 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A "use" cannot be considered to be a statutory class of invention.

4. Claims 16, 25, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

If applicants intend to claim a process of using, then the claims are indefinite because they fail to recite definitive process steps.

5. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1711

Firstly, the terminology, “usual additives”, of claim 1 renders the claims indefinite, because the terminology is subjective.

Secondly, the terminology, “as well as”, of claim 1 renders the claims indefinite. The examiner suggests “and”.

Lastly, it is unclear what is meant by “substantially halogen-free”. Exactly how does “substantially halogen-free” differ from “halogen-free”?

6. Claims 2-9 and 18-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, the amendment to claim 2 is unclear, because the first bracket is missing. Also, claims 2 and 22 are not grammatically correct.

Secondly, with respect to claims 7, 8, and 21, it is unclear how the polybutadiene relates to the prepolymer. Does the prepolymer contain the polybutadiene?

Thirdly, no basis for each of the claimed weight percent values has been provided within claims 7, 9, 21 and 22.

7. Claims 2-6 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claims 2, 3, 5 and 19, it is unclear how the respective components are “based” on the recited species. The use of “based” renders the claims indefinite.

Art Unit: 1711

8. Claims 4, 5, and 18-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims fail to recite the type of molecular weight (i.e., number average, weight average, etc.); therefore, one of ordinary skill could not adequately determine the properties of the polyols or how to duplicate them.

9. Since claim 5 is a multiple dependent claim, the subject matter of claims 5 (when dependent on 4) and 19 is objected to as being identical.

10. Claims 7, 8, 12, 13, 21 and 26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In view of the language, "consists of", within claim 1, the position is taken that applicants' claims are closed to the inclusion of additional components; therefore, the materials of the aforementioned claims are excluded and, as a result, the claims fail to be further limiting.

11. Claims 5, 11, 19 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within claims 5 and 19, the significance of the word, "native", is unclear.

Art Unit: 1711

Secondly, the use of the language, “preferably” and “in particular”, renders the claims indefinite, because it cannot be determined if or to what extent the language modifies the preceding language.

12. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language, “the composition”, lacks antecedent basis. Furthermore, there is no requirement that the can contains the prepolymer composition; the claim is simply drawn to a can.

13. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear with respect to what “it” refers to within claim 12.

14. Claims 1-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not clear what “1C”, “1.5C”, and “2C” refers to, as presented within the specification. Furthermore, “1C” is present within claims 17 and 28.

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

Art Unit: 1711

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 1-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 16-37 of copending Application No. 09/058,901. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to a prepolymer composition having equivalent NCO contents and overlapping components.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

Art Unit: 1711

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 1-5, 9-19 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauls ('412) in view of Falkenstein et al. ('313).

Pauls discloses a storage stable polyurethane prepolymer composition, having an NCO content of 5 to 25 percent by weight, which may be dispensed from a pressure can to yield a dimensionally stable foam. See abstract and columns 2-4.

19. Pauls is silent regarding the use of the phosphorous containing compounds as softeners; however, the use of such compounds within polyurethane foam formulations was known at the time of the invention. Falkenstein et al. teach at column 3, lines 59-66 that the use of phosphorous containing compounds soften the foam and increase flame resistance.

20. Therefore, one of ordinary skill in the art would have been motivated to utilize the claimed phosphorous containing compounds within the Pauls composition, so as to obtain a foam having both decreased brittleness (increased softness) and improved flame resistance. The fact that the compounds function in a dual capacity provides further motivation for their use.

21. Claims 6-8, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauls ('412) in view of Falkenstein et al. ('313) as applied to claims 1-5, 9-19 and 22-28 above, and further in view of Friedman ('827) and either Nichols et al. ('646) or Burkhart et al. ('270 or '566).

Art Unit: 1711

As aforementioned within paragraphs 18-20, the combined teachings of Pauls and Falkenstein et al. are considered to render the use of phosphorous containing softening agents within pressure can dispensable polyurethane prepolymers *prima facie* obvious; however, the references are silent regarding the specific use of phosphorous containing polyols and polybutadienes. Friedman teaches the use of phosphorous containing polyols to provide flame resistance to polyurethanes and Nichols et al. disclose at column 1, lines 33-35 the use of polybutadienes as cell opening agents for polyurethane foams. The polybutadienes of Nichols et al. are considered to include liquids, because patentees refer to them as bleeding out, giving the foam an oily feel, at column 1, lines 50 and 51. Furthermore, Burkhart et al. disclose the use of liquid polybutadienes as molds release agent and cell opening agents. See abstracts.

22. Therefore, one of ordinary skill in the art seeking a pressure can dispensable prepolymer capable of yielding a foam of improved softness, flame resistance, and dimensional stability would have been motivated to utilize the flame retarding phosphorous polyols of Friedman and the polybutadienes of Nichols et al. or Burkhart et al. with the teachings of Pauls and Falkenstein et al., so as to arrive at the instant invention.

23. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

24. The references were cited and supplied to applicants during prosecution of the parent application.

Application/Control Number: 09/437,276

Page 9

Art Unit: 1711

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

Sergent/mm

May 9, 2000

Rabon Sergent
**RABON SERGENT
PRIMARY EXAMINER**